

**Technion-Israel Institute of Technology** 

**Computer Science Department** 

**Center for Graphics and Geometric Computing** 



## **CGGC Seminar**

## **Prof. Justin Solomon**

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## Application-Driven Geometric Machine Learning

From 3D modeling to autonomous driving, a variety of applications can benefit from data-driven reasoning about geometric problems. The available data and preferred shape representation, however, varies widely from one application to the next. Indeed, the one commonality among most of these settings is that they are not easily approached using data-driven methods that have become de rigueur in other branches of computer vision and machine learning. In this talk, I will summarize recent efforts in my group to develop learning architectures and methodologies paired to specific applications, from point cloud processing to mesh and implicit surface modeling. In each case, we will see how mathematical structures and application-specific demands drive our design of the learning methodology, rather than bending application details or eliding geometric details to apply a standard data analysis technique.

The lecture will be held on Monday, 20.06.2022, at 12:30, Taub 337

הזמנה זו מהווה אישור כניסה עם רכב לטכניון